

Upper Columbia Salmon Recovery Region



The Upper Columbia River Salmon Recovery Region in north central Washington includes the Columbia River and its tributaries upstream of the confluence of the Yakima River to the base of Chief Joseph Dam. River valleys are deeply incised and maintain low gradients except in headwaters. The climate includes extremes in temperatures and precipitation, with most precipitation falling in the mountains as snow. Melting snowpack, groundwater, and runoff maintain stream flows.

A large portion of the Upper Columbia Basin is publicly owned. The first draft recovery plan was completed in June 2005; subsequent drafts led to a Federal Register posting in September 2006, currently under review. The plan addresses Upper Columbia spring Chinook and steelhead, and three “core” areas supporting bull trout populations.

Key Facts

LISTED FISH

Steelhead (threatened)
Spring Chinook (threatened)
Bull trout (threatened)

MAJOR FACTORS LIMITING RECOVERY

- ▶ Hydropower system mortality on Columbia River
- ▶ Impaired stream flows in tributaries
- ▶ Barriers to fish passage in tributaries
- ▶ Excessive sedimentation
- ▶ Degraded riparian habitat
- ▶ Degraded water quality and temperature
- ▶ Altered flood plain and channel morphology
- ▶ Harvest

RECOVERY PLANNING STATUS

Draft recovery plan for Chinook, steelhead, and bull trout posted in Federal Register September 2006.

REGIONAL RECOVERY ORGANIZATION

Upper Columbia Salmon Recovery Board.

FEDERALLY RECOGNIZED TRIBES

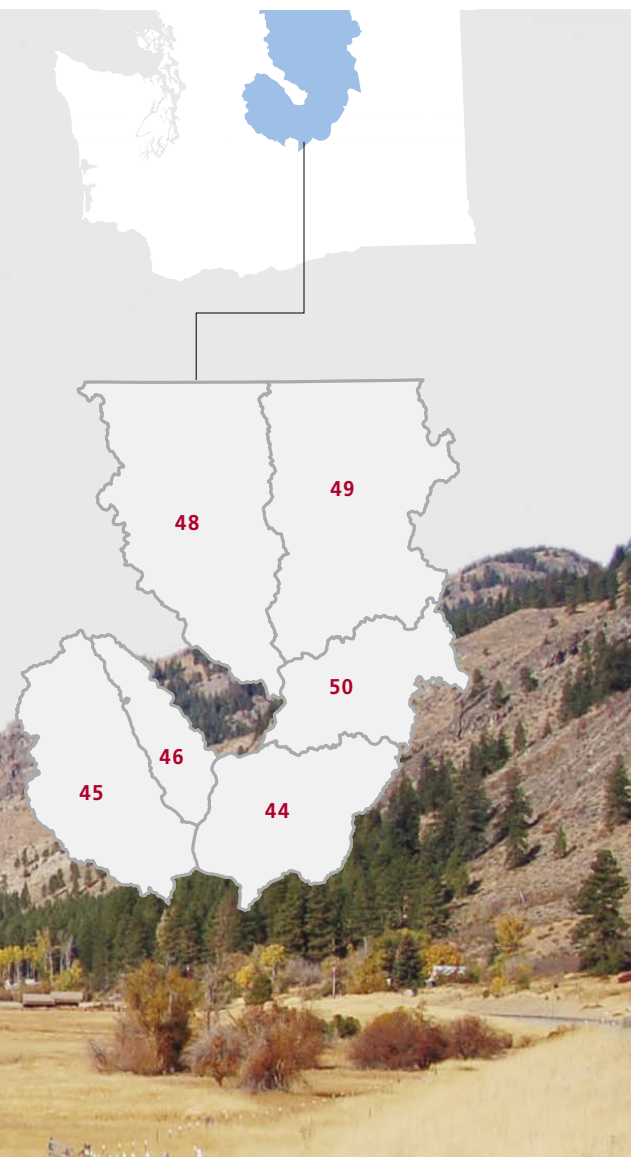
Colville Confederated Tribes, Yakama Nation.

COUNTIES

Chelan, Douglas, Okanogan.

WATER RESOURCE INVENTORY AREAS (WRIAs)

- 44** Moses Coulee
- 45** Wenatchee
- 46** Entiat
- 48** Methow
- 49** Okanogan
- 50** Foster



**UPPER COLUMBIA
SALMON RECOVERY
REGION**

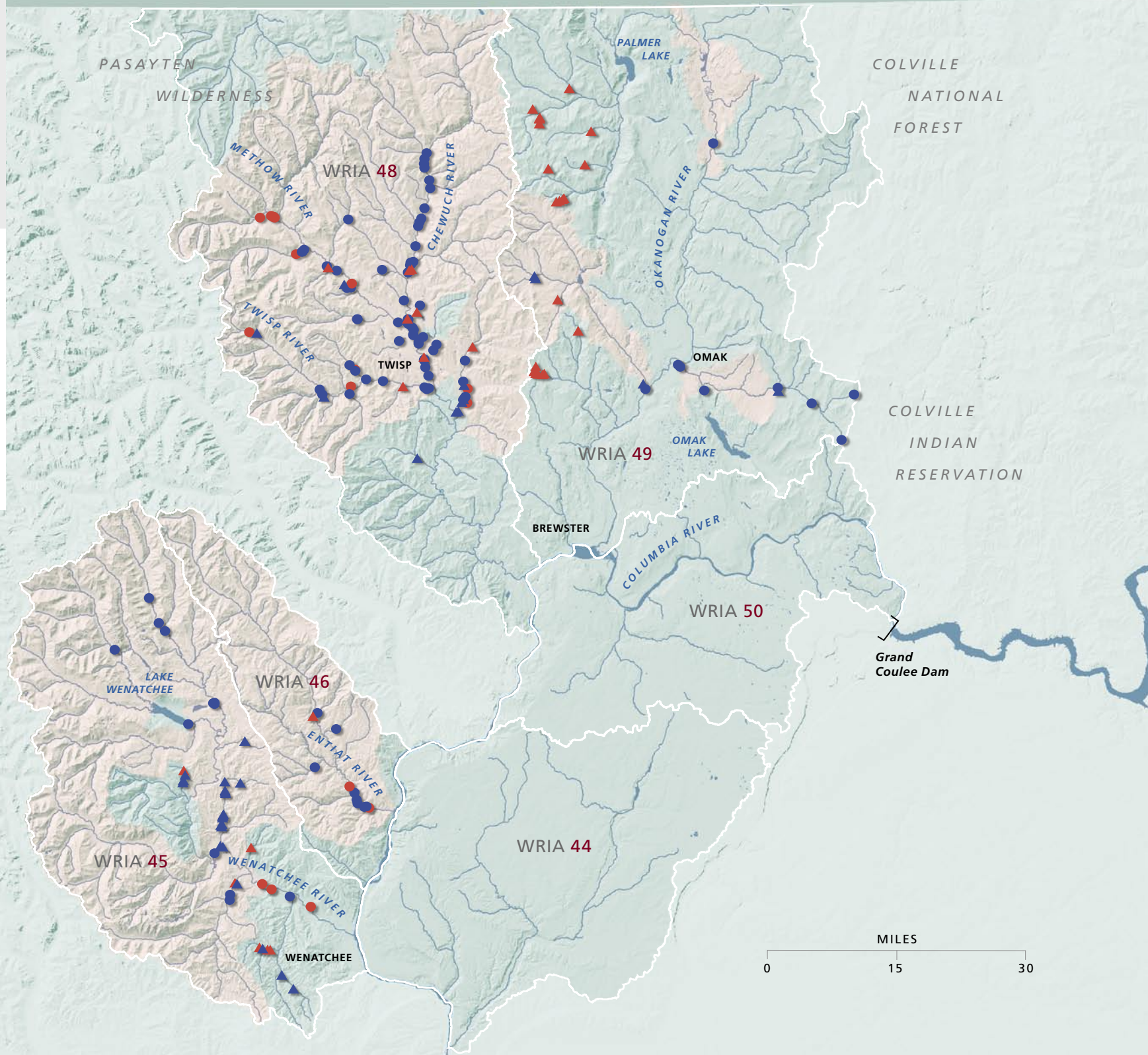
Fish Passage Projects

- ▲ 2004 to Present
- ▲ Pre 2004

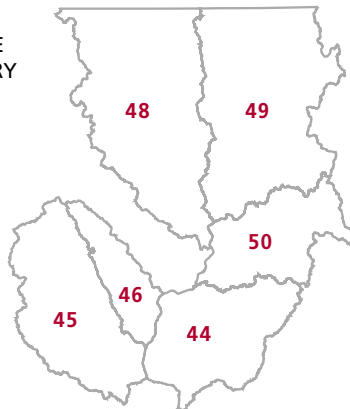
Habitat Projects

- 2004 to Present
- Pre 2004

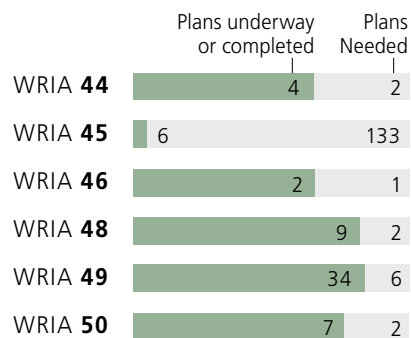
Priority Habitat Areas



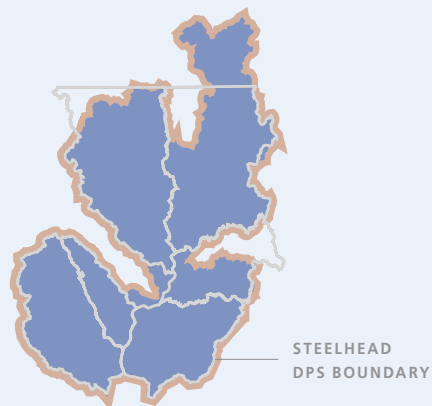
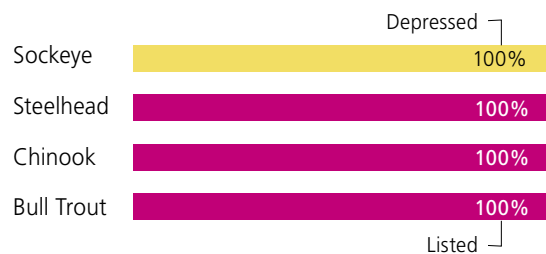
**WATER
RESOURCE
INVENTORY
AREAS
(WRIAs)**



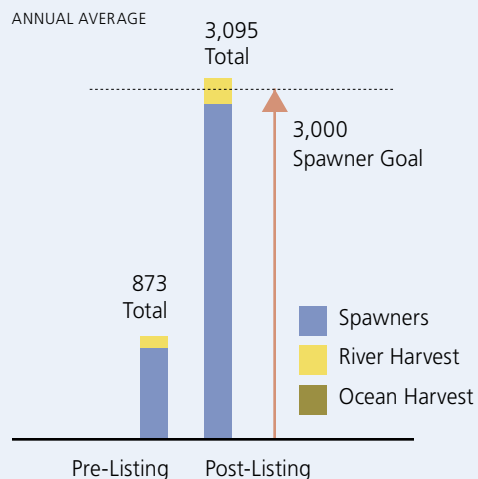
Watershed Cleanup Plans



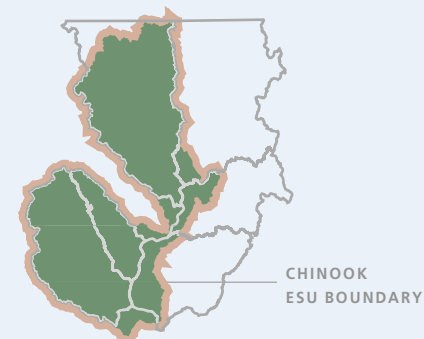
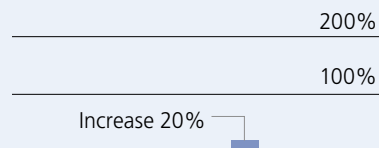
Fish Status



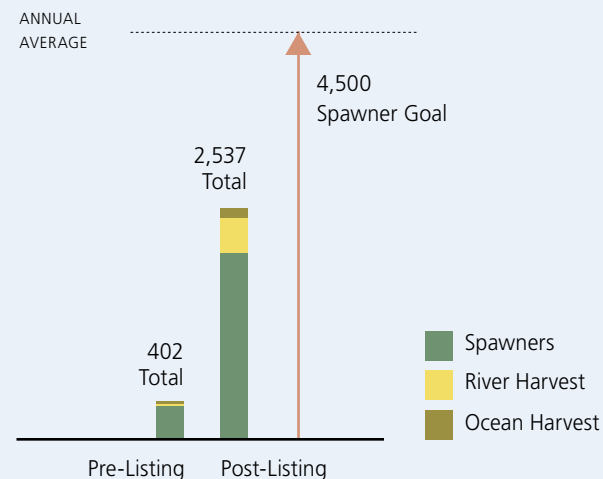
**Steelhead
Wild Adult Abundance
DPS Scale²²**



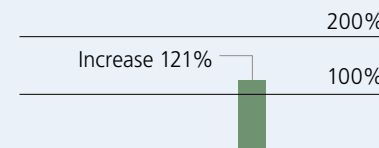
**Steelhead
Wild Juvenile Production²³
Since Listing**



**Chinook
Wild Adult Abundance
ESU Scale²²**



**Chinook
Wild Juvenile Production²⁴
Since Listing**





UPPER COLUMBIA
SALMON RECOVERY
REGION

WENATCHEE BASIN



WATER
RESOURCE
INVENTORY
AREA

Watershed Watch Wenatchee Basin WRIA 45



The 1,370 square mile (854,000 acre) Wenatchee watershed lies completely within Chelan County. Federal and State lands comprise over 90% of the WRIA. Chiwawa, White, and Little Wenatchee Rivers along with the lower and upper Wenatchee River are the main watercourses, with numerous smaller creeks. Less than 10% of the

watershed is in private ownership, most of which is concentrated along valley bottoms. Land uses in rural areas of the watershed are primarily forest management and production, orchard production, scattered residences, lodging facilities, agricultural support facilities, and small home-based industries.

Currently orchards comprise one of the largest private land uses (by acreage) in the WRIA. Approximately 23,850 people reside within the watershed on a full- or part-time basis, and the population in the WRIA is projected to increase approximately 2.4% per year between 2000 and 2025, primarily on privately owned land in the lower elevations and valley bottoms along the Wenatchee River and its major tributaries.

White River Habitat
Acquisition



Nason Creek
Off-Channel Habitat
Restoration



Peshastin
Creek Fish Barrier
Removal

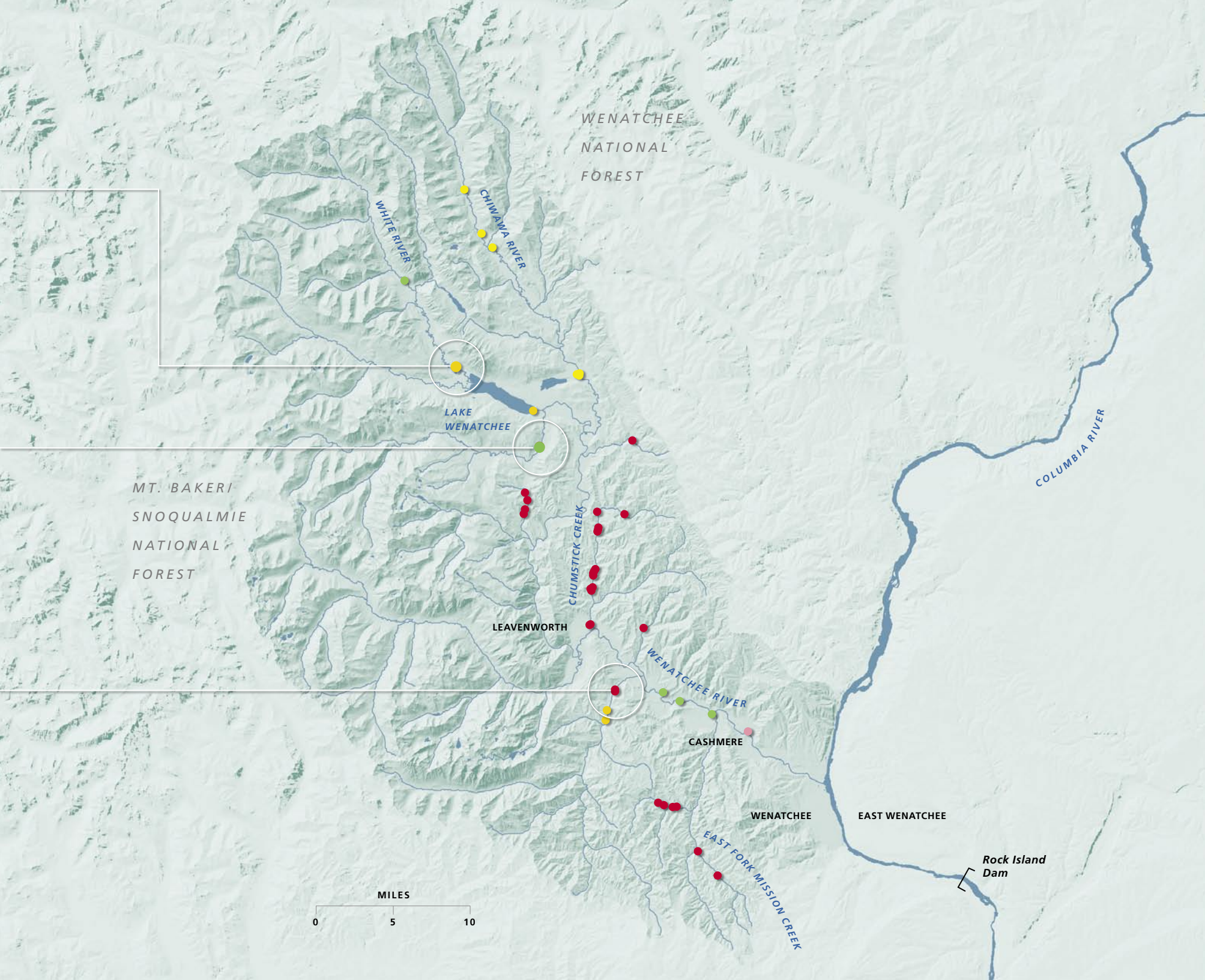


Floodplain
Riparian Protection
Project at
Wenatchee River



RESTORATION PROJECTS

- Fish Passage
- Riparian
- Instream Habitat
- Instream Flows
- Estuary
- Upland
- Miscellaneous





UPPER COLUMBIA
SALMON RECOVERY
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WENATCHEE BASIN



WATER
RESOURCE
INVENTORY
AREA

WENATCHEE BASIN WRIA 45 RECOVERY QUESTIONS

Are hydroelectric facilities operating in a “fish friendly” manner?

Indicator	Measured Results
FERC-licensed facilities	There are no FERC-licensed facilities in WRIA 45

Are streams accessible to wild salmon?

Indicator	Measured Results
Inventory of major blockages	<div>Complete barriers14</div> <div>Partial barriers17</div>
Miles of anadromous waters inaccessible	Not available

Are listed populations abundant and productive?

Indicator	Measured Results
Run size achieved, 5 year average pre- and post listing. Wild component of Wenatchee-Methow Major Population Group.	Steelhead
	Pre-listing873
	Post-listing3,095
	Chinook
	Pre-listing402
	Post-listing2,537
Juvenile production achieved (baseline mean)	Steelhead: 36,211 Chinook: 22,261

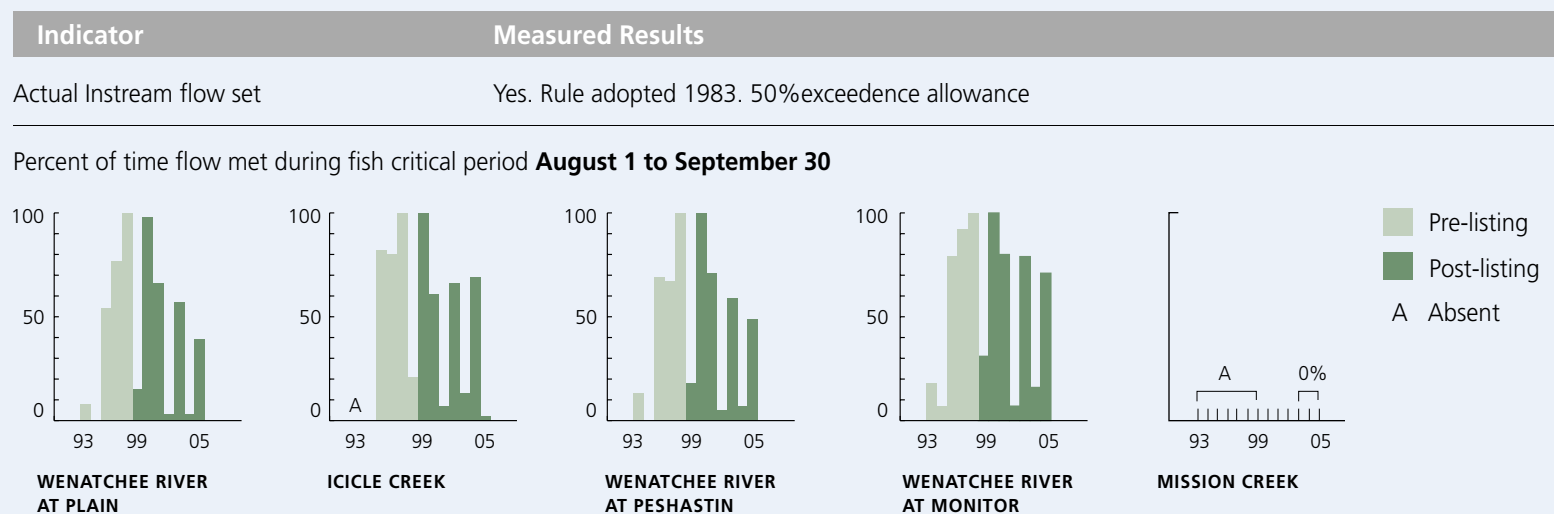
Is water clean enough to support wild salmon?

Indicator	Measured Results
Water quality index parameters	Fecal coliform
	3531
	Dissolved oxygen
	583
	pH
	668
	Temperature
	3970

Stream segments meeting standard

Stream segments not meeting standard

Do rivers and streams have flows that support wild salmon?



Does harvest management protect wild salmon?

Indicator	Measured Results					
Recovery plan spawner escapement goal (ESU scale)	Steelhead: 3,000 Chinook: 4,500					
Wild spawners 5 year average pre- and post listing (ESU scale)	Steelhead	Pre-listing	<div><div></div></div> 764	Chinook	Pre-listing	<div><div></div></div> 354
		Post-listing	<div><div></div></div> 2,856		Post-listing	<div><div></div></div> 2,030
Percent of wild salmon run that is harvested 5 year average pre- and post listing (ESU scale)	Steelhead	Pre-listing	12%	Chinook	Pre-listing	12%
		Post-listing	8%		Post-listing	20%

Do hatchery practices meet the needs of wild salmon?

Indicator	Measured Results		
Does a scientific evaluation of practices exist?	Recovery plan recommendations complete; Hatchery Scientific Review Group pending		
If so, what actions have been accomplished?	29	18	11
	Implemented	Ongoing	Not Begun